

FIGURE 1

FIG. 2 is a block diagram of a system for transforming allocation and deallocation instructions in a program segment. The system includes an original program segment 202, a transformation stage 204, a client segment 220, and a server program 210. The original program segment 202 contains instructions 212-218. The transformation stage 204 receives these instructions and outputs allocation instructions 224 to the client segment 220 and deallocation instructions 232 to the server program 210. The client segment 220 contains instructions 228-234. The server program 210 contains a malloc table 208 and a free table 210, which are used to manage memory allocation and deallocation.

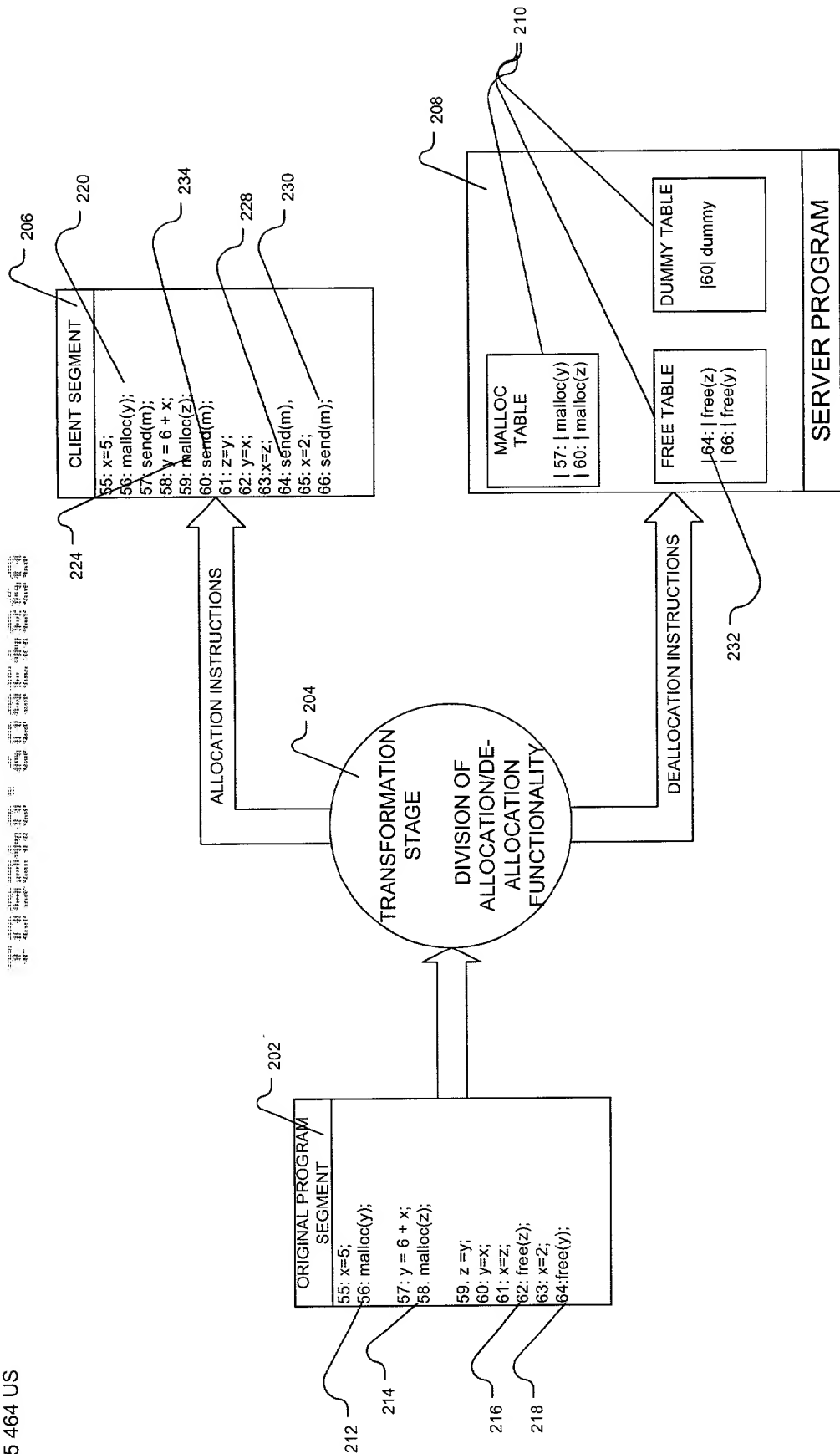
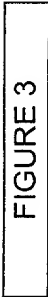


FIGURE 2



**FIGURE 3**

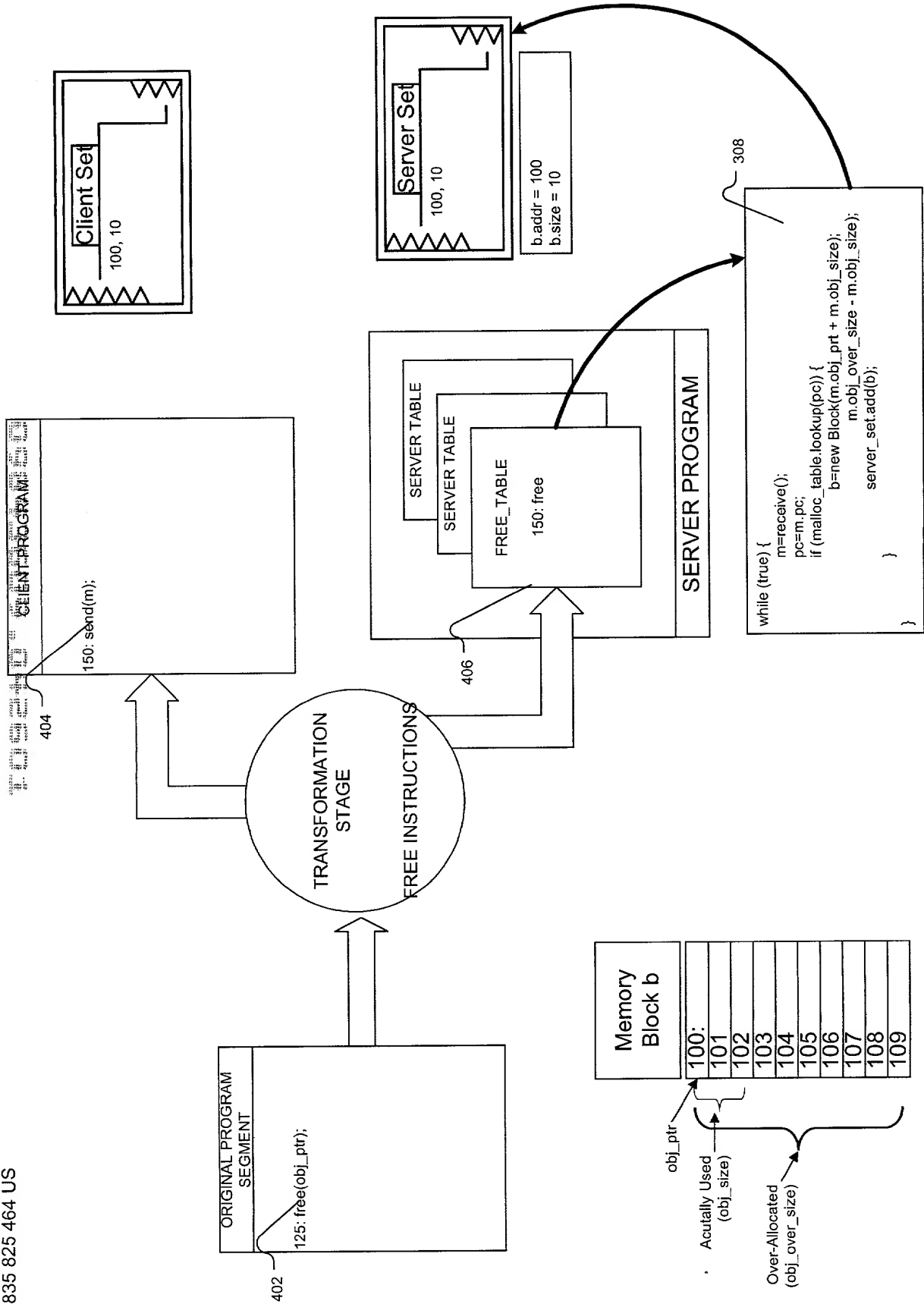
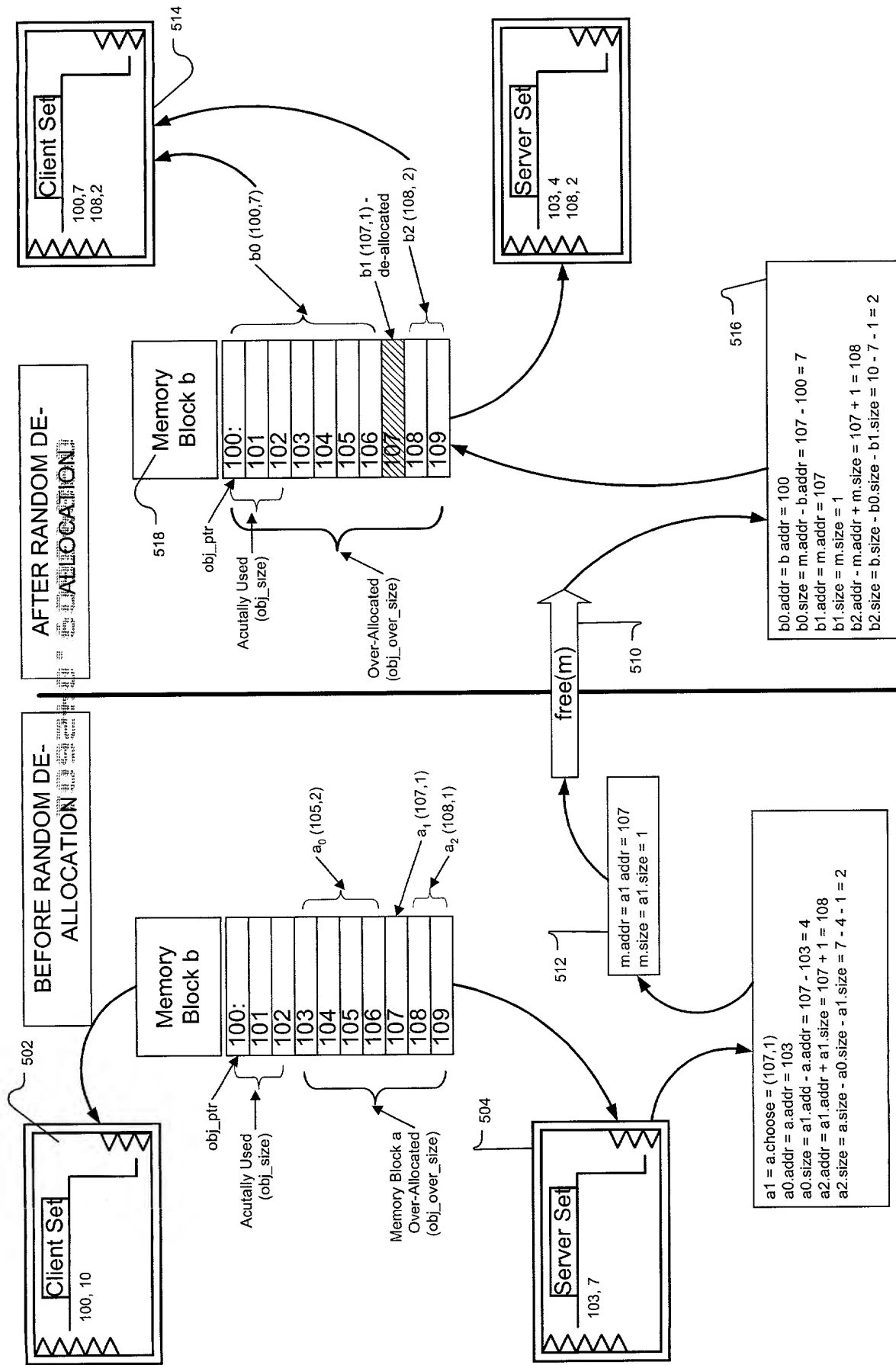


FIGURE 4



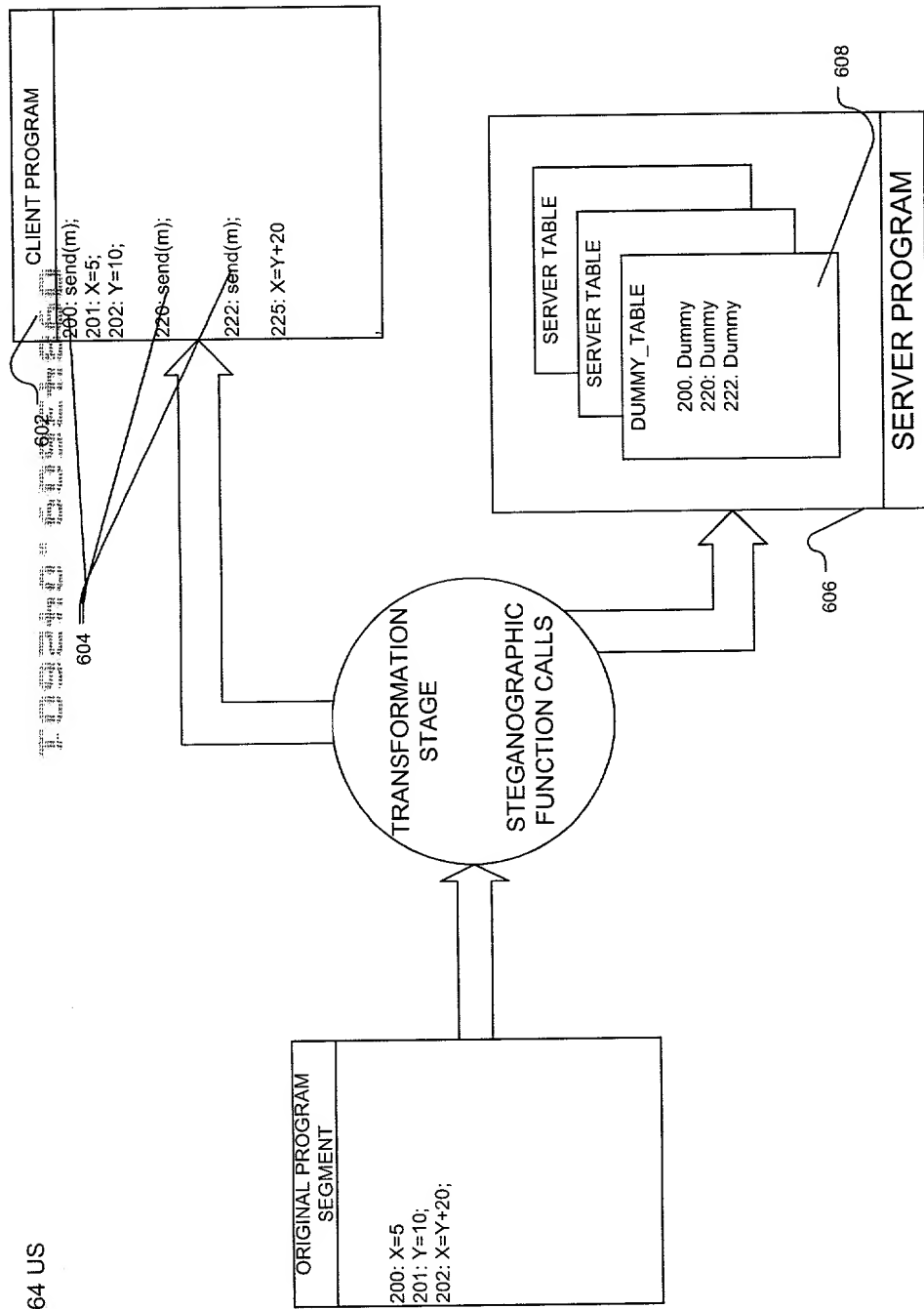


FIGURE 6